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EXAMINER

MOORE, WALTER A

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,671	<b>Applicant(s)</b> FRY ET AL.	
	<b>Examiner</b> WALTER MOORE	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,8-13,18-22 and 40-46 is/are pending in the application.
- 4a) Of the above claim(s) 42-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4,6,8-13,18-22 and 40-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/20/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01042007, 09052008</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-13, 18-22, and 40-41, in the reply filed on 27 May 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 42-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 27 May 2009.

### ***Specification***

3. The disclosure is objected to because CARTOSOL on page 15, line 13, should be spelled CARTASOL. Appropriate correction is required.

### ***Claim Interpretation***

4. In claim 18 the element "light transmission increasing" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The Examiner is interpreting a "light transmission increasing means for increasing an ability . . . to transmit light" as either dye (Specification, p. 2, ln. 24-25); "other ingredients or components" (Specification, p. 2, ln. 27-28); or a starch or starch-like material (Specification, p. 10, ln. 17-18 and ln. 23-24).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 11-13, 18-22, and 40-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 4 and 20 are indefinite because they claim only a range of time for Gurley density. Gurley density is a measure of time for a given volume of air at a given pressure to pass through a barrier. However, the claims only indicate an amount of time. The claims do not indicate either pressure or volume. Prior art indicates air volumes from 10cc to 20 ounces. Both the specification and claims are silent as to the both the air volume and pressure. Based on either the specification or the claims, one of ordinary skill in the art would lack sufficient information to determine what paper would meet the claimed limitations.

8. Claims 11-13 are indefinite because the meaning of starch-like material is unclear. What is the difference between a starch and a starch-like material?

9. Claim 13 is indefinite because the phrase "substantially penetrates" is unclear. How much penetration is required to be substantial?

10. In claim 18 the element "light transmission increasing" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

As discussed in the Claim Interpretation section above, the Specification discloses three different structures, which function to increase light transmission. Specifically, the Specification discloses each of the following increase light transmission: dye (Specification, p. 2, ln. 24-25); “other ingredients or components” (Specification, p. 2, ln. 27-28); or a starch or starch-like material (Specification, p. 10, ln. 17-18 and ln. 23-24).

The Specification clearly links dye and a starch or starch-like material with the claimed function. However, the disclosure that “other ingredients or components” can increase the light transmission fails to disclose to one of ordinary skill in the art what “other ingredients or components” can perform the claimed function. As a result, the disclosure of “other ingredients or components” is an insufficient disclosure with respect to the means plus function limitation.

Applicant is required to:

- (a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- (b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

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- (a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or
- (b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

11. Claims 21 and 40 are indefinite because it is unclear how a dye can increase the ability of the release paper backing to transmit light. With respect to light filtration, color is defined by the wavelength of light that passes through the material, i.e. the wavelengths of light that are not absorbed. Therefore, a dye by definition permits some wavelength of light to pass and blocks other wavelengths of light. While a dye may be considered to permit the passage of some wavelengths it is also blocking the passage of others. Therefore, a dye does not increase transmitted light it filters out wavelengths of light.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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13. Claims 1-3, 6, 8, and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Small et al., USPN 6,319,360.

Regarding claims 1-3 and 21, Small teaches a release paper backing (mottled paper) comprising a network of fibers (col. 3, ln. 3), a red (col. 3, ln. 60, Example 3) or yellow dye (col. 3, ln. 54, Example 1). Although Small does not expressly teach the transmittance of the paper, one of ordinary skill in the art would expect that the property would be present in the paper because Small teaches use of similar materials (i.e. paper pulp and yellow or red dye) and a similar production process (i.e. mixing the dye with the fibrous pulp, col. 2, ln. 15-16, and calendaring the paper, col. 3, ln. 21-23) as disclosed. Mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention.

The limitation “having at least one major surface configured to support a release coating” is not a positive recitation of a release coating. The recitation that elements are configured to perform a function is not a positive limitation, but only requires the ability to perform. One of ordinary skill in the art would expect that a paper sheet would be able to support a release coating because paper sheets are commonly used as base materials in release liners.

Regarding claim 6, a “b\*” value on the L\*a\*b\* scale is defined as a yellow color. Since Small teaches the paper appears yellow (col. 3, ln. 53-55, Table 1, Example 1), one of ordinary skill in the art would expect the paper to exhibit a positive b\* value.

Regarding claim 8, Small teaches the dye is mixed with the pulp before forming the pulp into a paper sheet (col. 2, ln. 14-18, steps (a)-(c)). Therefore, one of ordinary

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skill in the art would expect that the dye is distributed throughout the network of fibers (papermaking stock).

Regarding claim 22, the wavelength of light for a given color is independent of the actual light source. Therefore, the dye will transmit light regardless of the source. For example, red light is light having a wavelength between about 620 nm and 750 nm. The color of electromagnetic radiation between 620 nm and 750 nm is red regardless of the light source.

14. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagamoto, JP 2001-271295. Please note the citations to Nagamoto refer to the English language translation.

Nagamoto teaches a core sheet comprising a network of fibers (cellulose fibers, p. 3, para 0006, line 4), a first coating on a surface of the core sheet (barrier layer, p. 3, para 8) configured to support a release coating (stratum disjunctum, p. 3, para 0007, lines 2-3), and a light transmission increasing means for increasing the ability of the core sheet to transmit light (rarefraction agent, p. 2, para 0007, line 2-4).

Regarding claim 19, Nagamoto teaches the light transmission is between 40% and 50% (p. 4, para 0011, line 6) to ensure label detection (p. 4, para 0009, line 2-3).

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4, 9-11, 13, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Small et al., USPN 6,319,360, in view of Hershey et al., USPA 4,154,899.

Small is relied on as above. Small does not teach a first clay coating on a first major surface of the core sheet of the release paper backing and a second clay coating on the second major surface of the core sheet.

Hershey is drawn to a process for making a coated paper (Abstract). Hershey teaches it is common to coat both sides of a core sheet (paper) with the coating material (col. 3, ln. 6-7). Furthermore, in each example Hershey coated both sides of the paper with the clay composition. Hershey teaches an aqueous coating composition comprising 40% to 100% (col. 3, ln. 54-55) clay (col. 3, ln. 42-43). Hershey teaches the coating composition increases the paper smoothness, which improves printing and finishing (col. 2, ln. 25-29). It would have been obvious to one of ordinary skill in the art at the time of invention to use a clay coating, as taught in Hershey, on the release paper backing (mottle paper), taught in Small, to obtain a release paper backing having a clay coating on both sides of the core sheet. One of ordinary skill in the art would have been motivated to use a clay coating to increase the paper smoothness, which improves printing and finishing (Hershey, col. 2, ln. 25-29).

Regarding claim 11, Hershey teaches the coating includes a starch (hydroxyethylated starch ether, col. 4, ln. 60-61), a starch-like material (polyvinyl

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alcohol, col. 4, ln. 61-62), a latex (styrene/butadiene polymer, col. 4, ln. 61), or a combination thereof (butadiene/styrene latex and starch, col. 5, ln. 8-10).

Regarding claim 13, Small in view of Hershey does not expressly teach the coating substantially penetrates the core. However, one of ordinary skill in the art would expect that the coating substantially penetrates the core because the coating comprises the claimed materials (i.e. starch and clay) and the coating is applied in the same process (i.e. blade coater, Hershey, col. 2, ln. 52) as disclosed in the Specification. Furthermore, Hershey implies the coating is absorbed into the paper core by disclosing the solids content of the coating solution must be changed based on the water absorbing properties of the core material (col. 8, ln. 14-17).

Regarding claim 18, Small teaches a release paper backing (mottle paper, Abstract) comprising a core sheet comprising a network of fibers (paper web, col. 2, ln. 30-31) and a light transmission increasing means for increasing the ability of the core sheet to transmit light (yellow dye, col. 3, Table 1, Example 1), which is added to the core sheet (col. 2, ln. 15-16).

The limitation wherein the first coating is “configured to support a release coating” is not a positive recitation of a release coating. The recitation that elements are configured to perform a function is not a positive limitation, but only requires the ability to perform. One of ordinary skill in the art would expect that a mottled paper would be able to support a release coating because paper sheets are commonly used as base materials in release liners.

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Small does not teach a first coating positioned on a first major surface of the core sheet.

Hershey teaches an aqueous coating composition comprising clay (col. 3, ln. 42-43). Hershey teaches the coating composition increases the paper smoothness, which improves printing and finishing (col. 2, ln. 25-29). It would have been obvious to one of ordinary skill in the art at the time of invention to use a clay coating, as taught in Hershey, on the release paper backing (mottle paper), taught in Small, to obtain a release paper backing having a clay coating on a major surface of the core sheet. One of ordinary skill in the art would have been motivated to use a clay coating to increase the paper smoothness, which improves printing and finishing (Hershey, col. 2, ln. 25-29).

Regarding claims 4 and 20, Hershey teaches the Gurley density of the coated paper is between 4400 and 6500 (col. 12, Table III, Examples 8 and 5).

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Small et al., USPN 6,319,360, in view of Hershey et al., USPA 4,154,899, as applied to claims 4, 9-11, 13, 18, and 20 above, and further in view of Swerin et al., USPA 2004/0065423.

Small in view of Hershey is relied on as above. Small in view of Hershey does not teach a crosslinking agent. Swerin is drawn to paper having a central core, which is coated with a starch coating (Abstract). Swerin teaches adding a crosslinking agent to the starch solution to increase the strength and the hold-out attachment of the starch coating (p. 1, para. 0006, line 11-13). It would have been obvious to one of ordinary skill

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in the art at the time of invention to include a crosslinking agent, as taught in Swerin, to the clay and starch coating, taught in Small in view of Hershey, to obtain a release paper backing comprising a clay and starch coated core sheet with a crosslinker in the coating material. One of ordinary skill in the art would have been motivated to add a crosslinking agent to the coating material to increase the strength and the hold-out attachment of the starch coating (p. 1, para. 0006, line 11-13).

18. Claims 1-3, 6, 8, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiberge et al., USPN 6,630,056, in view of Imamura et al., USPN 5,948,511.

Regarding claims 1 and 21, Thiberge teaches a release-paper backing (color tracing paper), comprising a network of fibers (col. 6, ln. 9), and a yellow (col. 6, ln. 64, Examples 3-5) and/or red dye (col. 6, ln. 53, Example 2).

The limitation “having at least one major surface configured to support a release coating” is not a positive recitation of a release coating. The recitation that elements are configured to perform a function is not a positive limitation, but only requires the ability to perform. One of ordinary skill in the art would expect that a paper sheet would be able to support a release coating because paper sheets are commonly used as base materials in release liners.

Thiberge does not expressly state the transmittance of the release-paper backing (tracing paper). However, Thiberge teaches the paper is translucent (col. 1, ln. 2). A translucent material is a material that causes light to diffuse or scatter as the light

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passes through the object. As a result, linear transmittance of light through the material is reduced. More diffusion of light causes a reduction in the clarity of the object seen through the material. So, a translucent object that has more light diffusion will have a lower linear transmittance.

Where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges of transmittance involves only routine skill in the art. MPEP 2144.05 II. Therefore, it would have been obvious to one of ordinary skill in the art to optimize the range of transmittance, taught in Thiberge, to obtain a release paper backing having a transmittance between about 40% and about 80% at a wavelength of about 680 nm.

In the alternative, if Thiberge does not the claimed transmittance, then Imamura is drawn to a transfer sheet and a tracing paper (Abstract). Imamura teaches a tracing paper with a transmittance of 40 to 65% in a wavelength range of 500 to 600 nm, which results in an image having a higher contrast (col. 9, ln. 20-27). It would have been obvious to one of ordinary skill in the art at the time of invention to use a transmittance of 40% to 65% at a wavelength in the range of 500 to 600 nm, as taught in Imamura, in the release paper backing (tracing paper), taught in Thiberge, to obtain a release paper backing (tracing paper) having a transmittance of between 40% and 65% at a wavelength of about 680 nm. One of ordinary skill in the art would have been motivated to use a transmittance of between 40% and 65% to obtain a tracing paper with a high contract image (col. 9, ln. 20-27).

Regarding claim 6, Thiberge teaches the release-paper backing (color tracing paper) has a positive  $b^*$  value (col. 7, ln 9-11).

Regarding claim 8, Thiberge teaches the dye added to the aqueous solution of paper pulp fibers before forming the sheet of paper (col. 6, ln. 16). Therefore, one of ordinary skill in the art would expect that the dye is distributed throughout the network of fibers.

Regarding claim 22, The limitation wherein the dye is configured to increase the ability of the release paper backing to transmit light from a red, green, blue, or white LED is a functional limitation. Claims must be distinguished from the prior art in terms of structure rather than function. Although Thiberge or Thiberge in view of Imamura does not expressly teach the functional limitation, one of ordinary skill in the art would expect the release paper backing (tracing paper) to perform the claimed function because the tracing paper has the claimed structure. See MPEP §§ 2112 and 2114. Furthermore, the wavelength of light for a given color is independent of the actual light source. Therefore, the dye will transmit a given light wavelength regardless of the source. For example, red light is light having a wavelength between about 620 nm and 750 nm. The color of electromagnetic radiation between 620 nm and 750 nm is red regardless of the light source.

19. Claims 4, 9-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiberge et al., USPN 6,630,056, in view of Imamura et al., USPN

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5,948,511, as applied to claims 1-3, 6, 8, and 21-22 above, and further in view of Hershey et al., USPA 4,154,899.

Thiberge in view of Imamura is relied on as above. Thiberge in view of Imamura does not teach a first clay coating on a first major surface of the core sheet of the release paper backing and a second clay coating on the second major surface of the core sheet.

Hershey is drawn to a process for making a coated paper (Abstract). Hershey teaches it is common to coat both sides of a core sheet (paper) with the coating material (col. 3, ln. 6-7). Furthermore, in each example Hershey coated both sides of the paper with the clay composition. Hershey teaches an aqueous coating composition comprising 40% to 100% (col. 3, ln. 54-55) clay (col. 3, ln. 42-43). Hershey teaches the coating composition increases the paper smoothness, which improves printing and finishing (col. 2, ln. 25-29). It would have been obvious to one of ordinary skill in the art at the time of invention to use a clay coating, as taught in Hershey, on the release paper backing (tracing paper), taught in Thiberge, to obtain a release paper backing having a clay coating on both sides of the core sheet (paper). One of ordinary skill in the art would have been motivated to use a clay coating to increase the paper smoothness, which improves printing and finishing (Hershey, col. 2, ln. 25-29).

Regarding claim 11, Hershey teaches the coating includes a starch (hydroxyethylated starch ether, col. 4, ln. 60-61), a starch-like material (polyvinyl alcohol, col. 4, ln. 61-62), a latex (styrene/butadiene polymer, col. 4, ln. 61), or a combination thereof (butadiene/styrene latex and starch, col. 5, ln. 8-10).

Regarding claim 4, Hershey teaches the Gurley density of the coated paper is between 4400 and 6500 (col. 12, Table III, Examples 8 and 5).

Regarding claim 13, Thiberge in view of Hershey does not expressly teach the coating substantially penetrates the core. However, one of ordinary skill in the art would expect that the coating substantially penetrates the core because the coating comprises the claimed materials (i.e. starch and clay) and the coating is applied in the same process (i.e. blade coater, Hershey, col. 2, ln. 52) as disclosed in the Specification. Furthermore, Hershey implies the coating is absorbed into the paper core by disclosing the solids content of the coating solution must be changed based on the water absorbing properties of the core material (col. 8, ln. 14-17).

20. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thiberge et al., USPN 6,630,056, in view of Imamura et al., USPN 5,948,511, in view of Hershey et al., USPA 4,154,899, as applied to claims 4, 9-11, and 13 above, and further in view of Swerin et al., USPA 2004/0065423.

Thiberge in view of Imamura in view of Hershey is relied on as above. Thiberge in view of Imamura in view of Hershey does not teach a crosslinking agent. Swerin is drawn to paper having a central core, which is coated with a starch coating (Abstract). Swerin teaches adding a crosslinking agent to the starch solution to increase the strength and the hold-out attachment of the starch coating (p. 1, para. 0006, line 11-13). It would have been obvious to one of ordinary skill in the art at the time of invention to include a crosslinking agent, as taught in Swerin, to the clay and starch coating, taught



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in Thiberge in view of Hershey, to obtain a release paper backing comprising a clay and starch coated core sheet with a crosslinker in the coating material. One of ordinary skill in the art would have been motivated to add a crosslinking agent to the coating material to increase the strength and the hold-out attachment of the starch coating (p. 1, para. 0006, line 11-13).

21. Claims 1-3, 6, and 21-22, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamoto, JP 2001-271295.

Regarding claims 1, 21, and 40, Nagamoto teaches release paper backing (release paper for adhesive labels, p. 1, para 0001) comprising a network of fibers (cellulose fibers, p. 3, para 0006, line 4), and a release coating (stratum disjunctum, p. 3, para 0007, lines 2-3). Nagamoto teaches the light transmission is between 40% and 50% (p. 4, para 0011, line 6) to ensure label detection (p. 4, para 0009, line 2-3).

Nagamoto does not expressly teach adding a red or yellow dye to the release paper backing. However, Nagamoto teaches dye (paints) may be added to the release paper backing (p. 3, para 0008, line 9). It is well known in the art to add a dye to a paper material to change the color of the paper. The color of the release paper backing is deemed to be a matter of aesthetic design choice. Matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. The addition of a red or yellow dye to the release paper backing would have been obvious to one of ordinary skill in the art at the

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time of invention. One of ordinary skill in the art would have been motivated to add a yellow or red dye to obtain an aesthetically pleasing release paper backing.

Regarding claim 6, a “b\*” value on the L\*a\*b\* scale is defined as a yellow color. One of ordinary skill in the art would expect a yellow or red dyed paper to exhibit a positive b\* value.

Regarding claims 22 and 41, the limitation wherein the dye is configured to increase the ability of the release paper backing to transmit light from a red, green, blue, or white LED is a functional limitation. Claims must be distinguished from the prior art in terms of structure rather than function. Although Nagamoto does not expressly teach the functional limitation, one of ordinary skill in the art would expect the release paper backing to perform the claimed function because the release paper backing, taught in Nagamoto, has the claimed structure and Nagamoto teaches the transmittance of the release paper backing is greater than 40%. See MPEP §§ 2112 and 2114. Furthermore, the wavelength of light for a given color is independent of the actual light source. Therefore, the dye will transmit a given light wavelength regardless of the source. For example, red light is light having a wavelength between about 620 nm and 750 nm. The color of electromagnetic radiation between 620 nm and 750 nm is red regardless of the light source.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WALTER MOORE whose telephone number is (571) 270-7372. The examiner can normally be reached on Monday-Thursday 9:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WM/  
Walter Moore, Examiner AU 1794  
8/27/2009

/Alicia Chevalier/  
Primary Examiner, Art Unit 1794